

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A method to cold-start a fuel cell system at subfreezing temperatures, the fuel cell system having a fuel cell stack upstream which is connected a heating device to heat a cooling agent to be circulated by a coolant pump, said method comprising:

during a start-up time, at an ambient temperature that is below a temperature at which the fuel cell stack is capable of sustaining a normal operation, operating the fuel cell stack at an output power that is adequate to operate the heating device and the coolant pump;

using the power provided by the fuel cell stack to operate the heating device for heating the cooling agent, as well as the coolant pump;

circulating the cooling agent between the fuel cell stack and the heating device; and

shutting off the heating device when the fuel cell stack has reached a preset temperature that is higher than the original temperature; wherein,

the fuel cell system includes a starter battery;

the starter battery is dimensioned such that it has an output capacity that is ~~sufficient only~~ able to supply electrical power to start ~~components necessary for the supply of~~ reactants to the fuel cell stack, until the fuel cell itself generates electrical power, said output capacity being no greater than 1.5 kW, for less than five seconds;

in a first stage the starter battery initially supplies power to the auxiliaries necessary for the supply of reactants to the fuel cell stack; and

initial power supply is interrupted when the fuel cell stack generates electrical power.

Claim 2. (Original) The method of claim 1 wherein the preset temperature is at least 0 degrees Celsius.

Claim 3. (Original) The method of claim 1 wherein the preset temperature is at least +5 degrees Celsius.

Claim 4. (Previously Presented) The method of claim 1, wherein the fuel cell stack is operated until the preset temperature has been reached, at a capacity that does not exceed 10% of the nominal output power of the fuel cell system.

Claim 5. (Previously Presented) The method of claim 1, wherein the heating device is a burner.

Claim 6. (Previously Presented) The method of claim 5 wherein power is provided from the fuel cell stack to auxiliary devices for the operation of the burner.

Claim 7. (Previously Presented) The method of claim 5, wherein the burner is operated with hydrogen.

Claim 8. (Previously Presented) The method of claim 5, wherein the same air compressor is used to supply oxygen to the fuel cell stack and to the burner.

Claim 9. (Previously Presented) The method of claim 5, wherein the burner is a high-performance gas burner.

Claim 10. (Previously Presented) The method of claim 8, wherein an air volume provided by the air compressor is divided between the burner and the fuel cell stack, with a ratio that favors the burner.

Claim 11. (Original) The method of claim 10 wherein the air volume provided by the air compressor is divided between the burner and the fuel cell stack with a 4:1 ratio.

Claim 12. (Previously Presented) The method of claim 1, wherein the fuel cell stack is a solid-polymer-electrolyte fuel cell stack.

Claims 13.-15. (Cancelled)

Claim 16. (Previously Presented) A method to cold-start a fuel cell system at sub-zero temperatures, the fuel cell system having a fuel cell stack upstream of which is connected a heating device to heat a cooling agent to be circulated by a coolant pump and which is equipped with a starter battery, wherein an output power generated by the fuel cell stack is sufficiently large to operate the heating device and the coolant pump, said method comprising the following steps:

supplying power from the starter battery to auxiliaries necessary for the supply of reactants to the fuel cell stack;

interrupting this initial power feed to the auxiliaries when the fuel cell stack generates electrical power;

using the power provided by the fuel cell stack to operate the heating device for heating the cooling agent as well as the coolant pump, and circulating the cooling agent between the fuel cell stack and the heating device; and

shutting off the heating device when the fuel cell stack has reached a preset temperature that is higher than an original temperature.